Nucleonica Comments 16.08.2007

1) Feature chart: add Standard in chart field for free user. At the moment this is empty.
2) Admin: user should be deleted in the Administration/Users using their USERID field, in order we can delete one of two or more identical user entries.
3) Can you check usernames in Nucleonica and wiki: they should be identical (case sensitive): perhaps this is the reason of sporadic wiki login problems?
4) Wiki login: if the first time we get help for "*Range & Stopping Power*" (a name containing an ampersand), after the login, the help will be redirected just to "*Range*" which doesn't exist.
5) Free trial, Admin User: change *Surname* to *Family name* and *Name* to *First name*
6) The wiki login should be case insensitive as is the Nucleonica login itself.

7) Reference Data, Description: put the preformatted description text between a pair of <pre>…</pre> tags in order to preserve the formatting.

8) Nuclear Data Retrieval: the Nuclide should be ordered ascending on the first click.
9) Nuclear Data Retrieval, Radiation search: If I search for one Energy-Range, only the first input field works correctly. An input in energy field 2 or 3 with the first field empty doesn't work.
10) Nuclear Data Retrieval, and search for Radiation 1202, 795 and 60 ± 1 keV; we get:
    - Tb153 matches only 2 values, 1202 & 795: wrong, should not be selected
    - Dy153 matches only 2 values, 1202 & 795: wrong
    - Lu171 matches all 3 values: correct
    - Th233 matches only the first value: wrong
11) Nuclear Data Retrieval: put the Q-Values in MeV and add the unit in the column header

12) Mass Activity Calculator: set the Activities (Bq & Ci) to 0 for stable nuclides; if the half life is unknown keep these fields empty; in both cases, activities should be disabled in the units dropdown list.

13) Nuclide mixtures: replace *Mass* by *Quantity* above the nuclide selector.
14) Nuclide mixtures: by default, enable the component table, just disable or hide the *Edit* column.
15) Nuclide mixtures: add a button to start the Mass Activity Calculator at the bottom.

16) Decay: select Pu239 and the Gammas Type of Graph. The parent product Pu239 is not selected by default for the graph. Parent and the total should be selected by default.
17) Decay and D&S graph: use a title like "1g Pu239" using the input quantities.
18) Decay Graph: axis labels e.g. replace "t [Years] (10^3)" on the X-axis legend by "t (years) (10^3)"
19) Decay mixture: normally the default decay time is 10 times the half life of the selected nuclide. For a mixture, it's just set to the half life of the shortest living nuclide. Default should be the 10x the shortest halflife.
20) Decay mixture: the Reset button sets the default decay time to 10^{-10} nsec for nat. U or Cs137+Ba137m and 1µsec for Spent fuel. This is wrong. Default should be the 10x the shortest halflife.
21) Decay mixture: the list of nuclides to the left of the graph can be very long, not only for mixtures; this list should be ordered in ascending MAT_INDEX order.

22) Decay, Create Mixture: just add "Decay of" before the name of the parent (nuclide or mixture) to name the newly created mixture, rather than "Decay Engine Result" and perhaps add the decay time (if is not the default).
23) Decay, mixture: rename the button "create nuclide mixture" with "*Save Result as Mixture*"
24) Decay, D&S, MAC, mixture: clicking on the mixture name (below application name) will open a new browser window. This should not be the case.

25) D&S: don't use the black colour for the graph: columns can be confused with ticks (e.g.: Co60, 2.51 MeV) use perhaps blue or dark blue?
26) D&S: After each calculation and after redrawing the graph, *Result details* are hidden and I have to click the button again. Include Results details.
27) D&S: Select Co60, X-Ray only and threshold off; after calculation, redraw the graph from 7.4 to 7.5 keV with auto scale X off: why the lines are so large?
28) D&S, mixture: selecting natural uranium: each line appears 3 times in the detail table with a different emission probability.
29) D&S, mixture: put the energy with the full precision given in the SQL table.
30) D&S, nuclide and mixture: put the Gamma Energy in keV in the Result detail table
31) D&S, mixture: replace μ by γ in the number of lines table
32) D&S, nuclide and mixture, Result details: in the column *Number of mean free path* change *(μd)* to *(μ·d)*.
33) D&S: the radiation table from *result details* is omitted in the printout. Please add this.

34) Physical constants: where are located the data? The table has only 3 columns but the web page 5 columns

35) NE: comparing of real values cannot be performed as with integers; use instead a adapted uncertainty range (e.g. 10^{-10}) to compare RTYP values
36) NE: when we change from one chart colour theme to another chart colour theme check all the boxes by default.
37) NE: put a black border around the background colour field under the legend. Since this is usually grey it is difficult to differentiate.
38) NE: the restore button in the set colour box doesn't work as expected: it should restore the original colour; or can you add a new button with this function?
39) NE, standard: the order of m- and n-state isomer boxes is now correct, but clicking m-state will select and highlight n-state and lead to reference data of the n-state.
40) NE: in the filter decay mode, the legend text has to be closer to the checkbox.
41) NE, General Electric: put the legend text closer to the checkbox
42) NE, JEARY: change half life to ½ life, and put the text closer to the checkbox, and keep the standard width for the colour box.
43) NE, spin ½ or integral: put the legend text closer to the checkbox and keep the standard width for the colour box
44) NE, S&P: use the J^{π} notation(e.g. 0^{+}) in the legend and in the nuclide box itself
45) NE, S&P: 0^{-} nuclides are treated as 0^{+} nuclides, for the colour of the box and for the counting. This is wrong. Please correct.
46) NE, spin/parity: can you put the spin/parity also into isomer boxes?
47) NE, Binding Energy: put the legend text closer to the checkbox
48) NE, Binding Energy: a precision of 3 digit after the decimal point suffices.
49) NE, Binding Energy: can you put the binding energy also into isomer boxes? (in this case you may suppress the unit MeV)

50) NE, B. Energy: change the 1. legend line from "*0 < BE ≤ 4 MeV*" to "*BE ≤ 4 MeV*"
51) NE: there is no way to delete a user colour scheme or to modify or rename it.
52) NE: a scheme saved with an existing name becomes a number attached e.g. *Karlsruhe+(0)*
53) NE: if *Karlsruhe+(0)* was the last used scheme, the next time NE will use *Karlsruhe+* instead of *Karlsruhe+(0)*.
54) NE: a user theme based on the Karlsruhe scheme doesn't display the black header on primordial nuclide boxes. (U234, U235, U238, Th232)
55) NE, Karlsruhe theme: in the stable nuclide boxes, the abundance is omitted, e.g. Sc45, Ti46 to Ti50. Please add the abundance.
56) NE Karlsruhe: choose a lighter violet for CE (e.g. #e3acf9) with a black forground text in the legend and display CE modes of a nuclide only in the upper left corner using it legend colour.

57) My Preferences: clicking on My Chart should start the Nuclide explorer
58) My Preferences: clicking on a last Nuclide should show this nuclide in NE or start the last application used with this nuclide
59) For each last nuclide or mixture, save the Application & reuse it for starting the "last" nuclide or mixture.

60) Reference Data, Mass Activity Calculator, Decay, D&S…: add the Z-Number before the Element name.

61) Scripting: add the name of the element in the nuclide object

62) R&SP: User defined compounds: the name as well as the density is saved, but not the list of components itself, so we are not able to reuse it after leaving the application.
63) R&SP: Rename the radio button *solid* to *solid/liquid*.
64) R&SP: For chlorine and fluorine the gas and solid density was the same; I corrected these values in the SQL-Table ATOMDATA, but now the old values reappears. Why? Can you correct?
65) R&SP: Run a calculation for electron in Germanium. On the Results, CSDA Range R is 1.18 cm. The Graph Range show for 10 MeV a range of 6.5 cm which seems to be the Mass thickness.
66) R&SP: Run a calculation with a user compound (e.g. Sodium iodine) and look at the table. The columns *CSDA range* and *radiation yield* are omitted. These columns are also omitted by predefined compound and appear only with mono elements. Add these columns.

67) Wiki: problems with wiki
68) ReadingRoom: remove RR before each article
69) AdminOnly: delete various articles.

70) Web page: why does it takes so long to load the webpage www.nucleonica.net?
71) Portal: why does it take so long to load the Administration page?

72) Statistics per Application: monitor: a) access to wiki b) my Community c) Nuclear Data Retrieval (add also in Google Analytics)